§ 164.42 Rate of turn indicator.

Each vessel of 100,000 gross tons or more constructed on or after September 1, 1984 shall be fitted with a rate of turn indicator.

[CGD 83–004, 49 FR 43468, Oct. 29, 1984]

§ 164.43 Automatic Identification System Shipborne Equipment—Prince William Sound.

(a) Until July 1, 2004, each vessel required to provide automated position reports to a Vessel Traffic Service (VTS) under §165.1704 of this subchapter must do so by an installed Automatic Identification System Shipborne Equipment (AISSE) system consisting of a:

(1) Twelve-channel all-in-view Differential Global Positioning System (dGPS) receiver;

(2) Marine band Non-Directional Beacon receiver capable of receiving dGPS error correction messages;

(3) VHF—FM transceiver capable of Digital Selective Calling (DSC) on the designated DSC frequency; and

(4) Control unit.

(b) An AISSE must have the following capabilities:

(1) Use dGPS to sense the position of the vessel and determine the time of the position using Universal Coordinated Time (UTC);

(2) Fully use the broadcast type 1, 2, 3, 5, 6, 7, 9, and 16 messages, as specified in RTCM Recommended Standards for Differential NAVSTAR GPS Service in determining the required information;

(3) Achieve a position error which is less than ten meters (32.8 feet) 2 distance root mean square (2 drms) from the true North American Datum of 1983 (NAD 83) in the position information transmitted to a VTS;

(4) Achieve a course error of less than 0.5 degrees from true course over ground in the course information transmitted to a VTS;

(5) Achieve a speed error of less than 0.05 knots from true speed over ground in the speed information transmitted to a VTS;

(6) Receive and comply with commands broadcast from a VTS as DSC messages on the designated DSC frequency;

(7) Receive and comply with RTCM messages broadcast as minimum shift keying modulated medium frequency signals in the marine radiobeacon band, and supply the messages to the dGPS receiver;

(8) Transmit the vessel's position, tagged with the UTC at position solution, course over ground, speed over ground, and Lloyd's identification number to a VTS;

(9) Display a visual alarm to indicate to shipboard personnel when a failure to receive or utilize the RTCM messages occurs;

(10) Display a separate visual alarm which is triggered by a VTS utilizing a DSC message to indicate to shipboard personnel that the U.S. Coast Guard dGPS system cannot provide the required error correction messages; and

(11) Display two RTCM type 16 messages, one of which must display the position error in the position error broadcast.

(c) An AISSE is considered non-operational if it fails to meet the requirements of paragraph (b) of this section.

NOTE: Vessel Traffic Service (VTS) areas and operating procedures are set forth in Part 161 of this chapter.

[CGD 90–020, 59 FR 36334, July 15, 1994, as amended by CGD 97–023, 62 FR 33365, June 19, 1997; USCG–2003–14757, 68 FR 39367, July 1, 2003]

§ 164.46 Automatic Identification System (AIS).

(a) The following vessels must have an installed, operational AIS that complies with the IMO Resolution MSC.74(69), ITU–R Recommendation M.1371–1, and IEC 61993–2, and that is installed using IMO SN/Circ.277 (Incorporated by reference, see §164.03) as of the date specified. ''Length'' refers to ''registered length'' as defined in 46 CFR, part 69.

(1) Self-propelled vessels of 65 feet or more in length engaged in commercial service and on an international voyage, not later than December 31, 2004.

(2) Notwithstanding paragraph (a)(1) of this section, the following vessels subject to the International Convention for Safety at Life at Sea, 1974, (SOLAS) as amended, that are on an international voyage must also comply with SOLAS, chapter V, as amended by